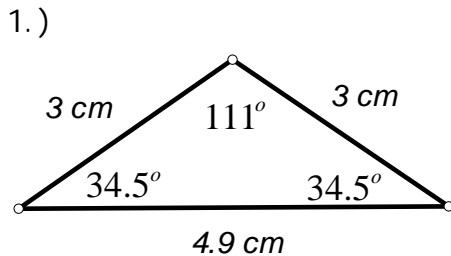


Unit 4 Remediation Packet

**Show your work on any problem that requires work!**

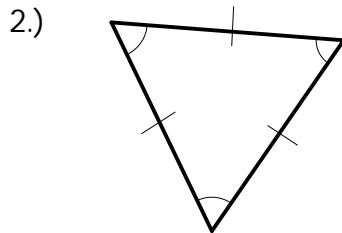
Target A

Classify each triangle according to its sides and angles.



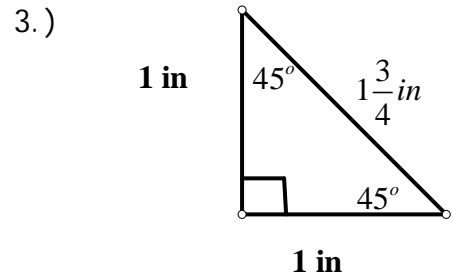
Sides: \_\_\_\_\_

Angles: \_\_\_\_\_



Sides: \_\_\_\_\_

Angles: \_\_\_\_\_



Sides: \_\_\_\_\_

Angles: \_\_\_\_\_

4.) The measures of  $\triangle ABC$  are  $3x$ ,  $2x$ , and  $55^\circ$ , find  $x$ , the measure of the angles and classify the triangle according to its angles.

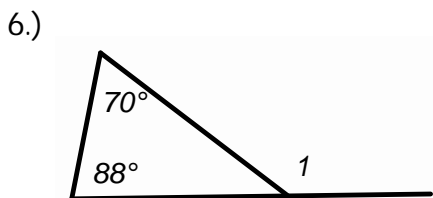
$x =$  \_\_\_\_\_, the 2 missing angles are \_\_\_\_\_ & \_\_\_\_\_; classification:

5.) A triangle has perimeter of 27 in, and its 3 sides measure  $2x - 5$ ,  $x + 2$  and 9 in. Find  $x$ , the measure of the two missing sides and classify according to its sides.

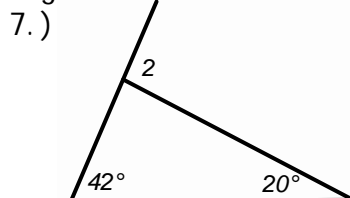
$x =$  \_\_\_\_\_, the 2 missing sides are \_\_\_\_\_ & \_\_\_\_\_; classification:

Target B

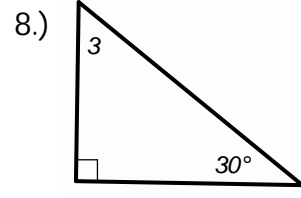
Find the measure of the numbered angle.



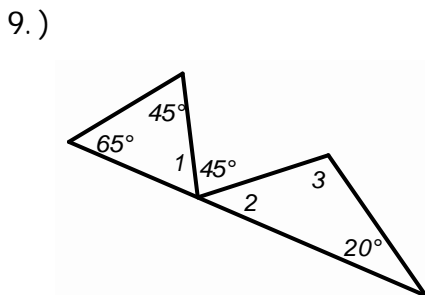
$m\angle 1 =$  \_\_\_\_\_



$m\angle 2 =$  \_\_\_\_\_



$m\angle 3 =$  \_\_\_\_\_



$m\angle 1 =$  \_\_\_\_\_

$m\angle 2 =$  \_\_\_\_\_

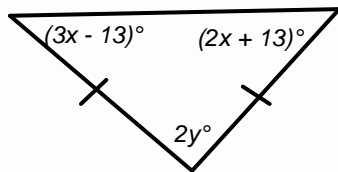
$m\angle 3 =$  \_\_\_\_\_

## Target C

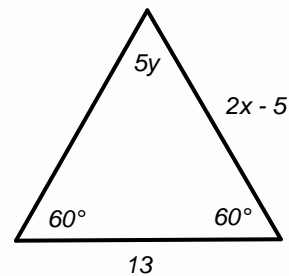
10.) An isosceles triangle has a vertex angle of  $80^\circ$ , sketch the isosceles triangle below. Label the legs, base, base angles and the vertex angle. Find the measures of the 2 base angles.

Find the values for  $x$  and  $y$  in the triangles below.

11.)



12.)



$x =$  \_\_\_\_\_  $y =$  \_\_\_\_\_

$x =$  \_\_\_\_\_  $y =$  \_\_\_\_\_

## Target D

13.) If  $\triangle ABC \cong \triangle ZXY$ , complete the congruency statements below:

$$\angle A \cong \angle \underline{\hspace{2cm}}$$

$$\angle B \cong \angle \underline{\hspace{2cm}}$$

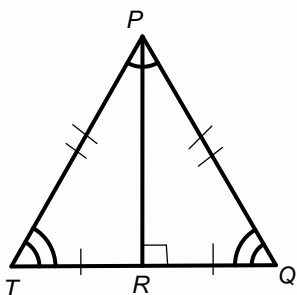
$$\angle C \cong \angle \underline{\hspace{2cm}}$$

$$\overline{AB} \cong \underline{\hspace{2cm}}$$

$$\overline{BC} \cong \underline{\hspace{2cm}}$$

$$\overline{AC} \cong \underline{\hspace{2cm}}$$

14.) Complete the congruency statement for the triangles:

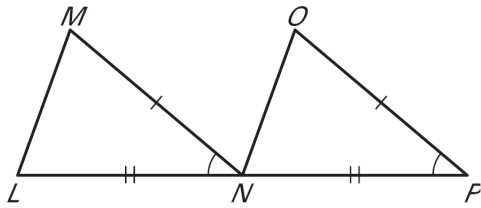


$$\triangle PQR \cong \triangle \underline{\hspace{2cm}}$$

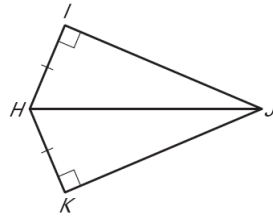
# Target E

Decide which postulate or theorem can prove each pair of triangles congruent. Your answers will be SSS, SAS, ASA, AAS, HL or none.

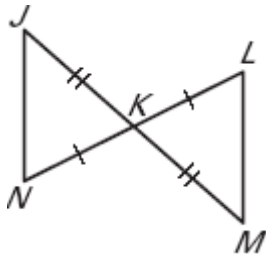
15.)



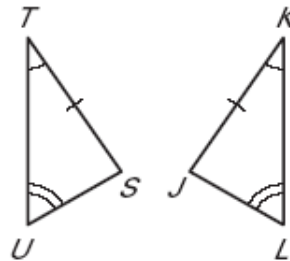
16.)



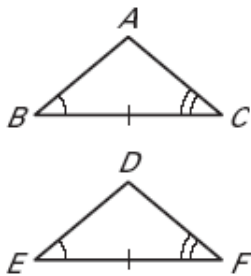
17.)



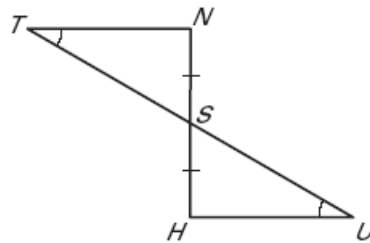
18.)



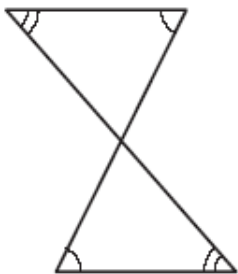
19.)



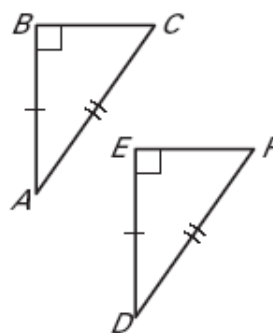
20.)



21.)



22.)

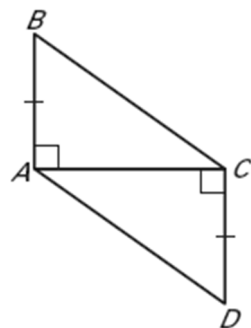


Target F

23.) What does CPCTC stand for?

What must you prove first before you use it?

24.)

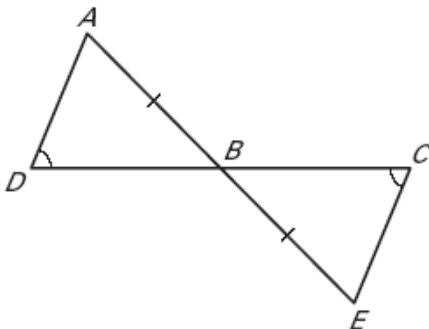


If you wanted to prove  $\overline{BC} \cong \overline{AD}$  using CPCTC, which triangles would you prove congruent first? Why are they congruent?

$\triangle ABC \cong \triangle$  \_\_\_\_\_ by \_\_\_\_\_

Target G

25.) Prove:  $\overline{BD} \cong \overline{BC}$



Statements	Reasons
1.) $\overline{AB} \cong \overline{BE}$	1.)
2.)	2.) Given
3.) $\angle ABD \cong \angle ECB$	3.)
4.) $\triangle ABD \cong \triangle ECB$	4.)
5.)	5.)